

**IN THE UNITED STATES DISTRICT COURT
THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

CDN INNOVATIONS, LLC

Plaintiff,

v.

TDS BROADBAND SERVICE LLC

Defendant.

Civil Action No. 6:20-cv-959

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff CDN Innovations, LLC (“CDN” or “Plaintiff”), for its Complaint against Defendant TDS Broadband Service LLC (referred to herein as “TDS” or “Defendant”), alleges the following:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

THE PARTIES

2. Plaintiff CDN is a limited liability company organized under the laws of the State Georgia with a place of business at 44 Milton Avenue, Suite 254, Alpharetta, GA 30009.

3. Upon information and belief, TDS is a Limited Liability Company organized under the laws of the State of Delaware, with a place of business at 800 North Main Street, Fort Stockton, TX 79735. Upon information and belief, TDS sells, offers to sell, and/or uses products and services throughout Texas, including in this judicial district, and introduces infringing products and services into the stream of commerce knowing that they would be sold and/or used

in this judicial district. As shown on the TDS website, TDS services Texas cities including Alpine and Fort Stockton. See <https://hellotds.com/texas.html> (last visited 10/13/2020).

JURISDICTION AND VENUE

4. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

5. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

6. Venue is proper in this judicial district under 28 U.S.C. § 1400(b).

7. This Court has personal jurisdiction over the TDS under the laws of the State of Texas, due at least to their substantial business in Texas and in this judicial district, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in the State of Texas. Venue is also proper in this district because TDS has a regular and established place of business in this district. For instance, TDS has an office in this judicial district. For example, TDS has a place of business located at 800 North Main Street, Fort Stockton, TX 79735 and provides is responsible for providing internet utility services in Texas and this District. See https://www.puc.texas.gov/industry/communications/directories/sicfa/report_sicfa.aspx?ID=CVS QL01DB1245583300001 (last visited 10/13/2020).

BACKGROUND

The Inventions

Adaptive Power Control

8. Sinikka Sarkkinen, Jari Isokangas, and Dimitris Koulakiotis (hereinafter “the Inventors”) are the inventors of U.S. Patent Nos. 7,006,844 (“the ‘844 patent”) and 7,860,462

(“the ‘462 patent”). A true and correct copy of the ‘844 patent is attached as Exhibit A. A true and correct copy of the ‘462 patent is attached as Exhibit B.

9. The ‘844 and ‘462 patents resulted from the pioneering efforts of the Inventors in the area of data transmissions in a wireless communication network, and more particularly the dynamic control of the power level of multicast data transmission. These efforts resulted in the development of a method and apparatus for adaptive power control for multicast transmission in 2002.

Detecting Port Inactivity

10. Brian Gonsalves and Kenneth Roger Jones (hereinafter “the Inventors”) are the inventors of U.S. Patent Nos. 7,293,291 (“the ‘291 patent”) and 7,565,699 (“the ‘699 patent”). A true and correct copy of the ‘291 patent is attached as Exhibit C. A true and correct copy of the ‘699 patent is attached as Exhibit D.

11. The ‘291 and ‘699 patents resulted from the pioneering efforts of the Inventors in the area of computer network connections, particularly in the area of detecting computer port inactivity. These efforts resulted in the development of a method and system for detecting an idle or inactive data port connection on a personal computer in 2003.

Television Guidance System

12. Francois Martin (hereinafter “the Inventor”) is the inventor of U.S. Patent No. 7,164,714 (“the ‘714 patent”). A true and correct copy of the ‘714 patent is attached as Exhibit E.

13. The ‘714 patent resulted from the pioneering efforts of the Inventor in the area of video transmission, particularly in the area of processing video for generation of mosaics. These efforts resulted in the development of a method and system for generating a user mosaic in 2002.

Recognizing Spoken Identifiers

14. David B. Anderson (hereafter “the Inventor”) the inventor of U.S. Patent No. 6,865,532 (“the ‘532 patent”). A true and correct copy of the ‘532 patent is attached as Exhibit F.

15. The ‘532 patent resulted from the pioneering efforts of Mr. Anderson (hereinafter “the Inventor”) in the area of voice operated communication devices, and more particularly the area of recognizing spoken identifiers. These efforts resulted in the development of a novel method for recognizing spoken identifiers having predefined grammars. At the time of these pioneering efforts, the most widely implemented voice-control technology used in device communications controlled by spoken commands were either simple systems involving speech to simply activate transmission (e.g., US 4,860,359 and US 5,008,954) or voice translations systems involving complex circuitry such as a series of circuits each circuited intended to handle a different aspect of voice recognition and translation (US 6,236,969). Thus, prior art spoken commands systems and methods were either too simple to provide sufficient voice-controlled functionality or too complex to be affordably produced and utilized in a portable apparatus and other communications devices.

16. The Inventor conceived of the inventions claimed in the ‘532 patent in part as a way to allow for asynchronous communications with a relatively non-complex device using spoken commands, with a lower incidence of errors. An exemplary description of this concept includes, among other elements, defining a phrase having word slots arranged in the phrase in a predetermined order and according to a predetermined grammatical structure of a target language. A set of unique words selected from the target language is assigned to each word slot in the phrase according to the grammatical structure. Then, unique identifiers can be generated

by selecting one word from each set for each slot for each identifier such that a concatenating of the selected words in the predetermined order form the unique identifier. Among other advantages, this way provides a cleverly structured simplification scheme as compared to the prior art, and one that is less prone to error.

17. By contrast, US Patent No. 6,236,969, cited in the Background section of the ‘532 patent describes complex three-circuit design. (*See* ‘532 patent at 2:26-38).

18. The ‘532 patent further explains that its spoken phrases are easier to remember than the prior art numeric identifiers, such as telephone numbers, while still providing a large number of possible identification numbers with a fairly small number of words in the phrase. (*See* ‘532 patent at 5:31-42.)

19. Because of these significant advantages that can be achieved through the use of the patented invention, the ‘532 patent presents significant commercial value for companies like TDS. Indeed, while such technology did not exist prior to the invention, since the issuance of the ‘532 patent many spoken-identifier-based voice-control technologies have emerged, utilizing features claimed in the ‘532 patent

20. The patented invention disclosed in the ‘532 patent resolves technical problems related to making voice-control workable in a range of communication devices, particularly problems related to the utilization of non-complex structure to enable a robust range of easily memorable commands while reducing susceptibility to error.

21. The claims of the ‘532 patent do not merely recite the performance of some well-known business practice from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claims of the ‘532 patent recite inventive concepts that are deeply rooted in engineering technology, and overcome problems specifically arising out of voice-

control technology, including, as noted above technology sufficient to provide robust voice-controlled functionality but not too complex to be affordably produced and utilized in a portable apparatus and other communications devices.

22. In addition, the claims of the ‘532 patent recite inventive concepts that improve the functioning of a range of voice-controlled communications devices, particularly compact, portable and affordable communications device, which typically lack high-speed processing capabilities for complex tasks.

23. Moreover, the claims of the ‘532 patent recite inventive concepts that are not merely routine or conventional use of a translation tool. Instead, the patented inventions disclosed in the ‘532 patent provide new and novel solutions to specific problems related to improving the ability of a range of communication devices to implement voice-control through the use of recognizable spoken identifiers.

24. And finally, the patented inventions disclosed in the ‘532 patent do not preempt all the ways that voice-controlled devices may be used to improve the recognition of spoken commands, nor does the ‘532 patent preempt any other well-known or prior art technology.

25. Accordingly, the claims in the ‘532 patent recite a combination of elements sufficient to ensure that the claim in substance and in practice amounts to significantly more than a patent-ineligible abstract idea.

Controlling Multiple Devices

26. Harold J. Weber (hereinafter “the Inventor”) is the inventor of U.S. Patent No. 6,628,344 (“the ‘344 patent”). A true and correct copy of the ‘344 patent is attached as Exhibit G.

27. The ‘344 patent resulted from the pioneering efforts of the Inventor in the area of signal or channel section, and more particularly the control of remote apparatuses. These efforts resulted in the development of a method and apparatus for controlling multiple devices in 2000.

Formatting Information for Display Device

28. Harold J. Weber (hereinafter “the Inventor”) is the inventor of U.S. Patent No. 6,311,180 (“the ‘180 patent”). A true and correct copy of the ‘180 patent is attached as Exhibit H.

29. The ‘180 patent resulted from the pioneering efforts of the Inventor in the area of generating a display document, and more particularly generating a display document to conform to a display device. These efforts resulted in the development of a method and apparatus for generating a display document that conforms to a display device according to the display device and viewer preferences of a user in 2000.

COUNT 1 – INFRINGEMENT OF U.S. PATENT NO. 7,006,844

30. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

31. On February 28, 2006, the ‘844 patent was duly and legally issued by the United States Patent and Trademark Office under the title “Adaptive power control for multicast transmission”.

32. CDN is the assignee and owner of the right, title and interest in and to the ‘844 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

33. Upon information and belief, TDS has and continues to directly infringe one or more claims of the ‘844 patent by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or

more of the products identified in Exhibit I hereto (the “*Accused 802.11 Instrumentalities*”). For example, upon information and belief, TDS at least uses, sells and offers to sell the *Accused 802.11 Instrumentalities* in United States.

34. Exemplary infringement analysis showing infringement of at least claim 23 of the ‘844 patent is set forth in Exhibit I. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by TDS with respect to the ‘844 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the ‘844 patent.

35. Upon information and belief, users of devices containing TDS’s *Accused 802.11 Instrumentalities* have and will continue to directly infringe at least claim 23 of the ‘844 patent.

36. Upon information and belief, TDS had knowledge of the ‘844 patent at least as early as its receipt of this complaint.

37. TDS’s encouragement of others to use the *Accused 802.11 Instrumentalities*—knowing that such use, as alleged herein, infringes at least claim 23 of the ‘844 patent—constitutes inducement of others under 35 U.S.C. § 271(b). TDS’s encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused 802.11 Instrumentalities* are not only compliant with the IEEE Std 802.11. Standard (“802.11”) but specifically intended for use as an 802.11 product.

38. For example, on its website, TDS expressly states its 5GHz range is smaller but supports faster connections <https://tdstelecom.com/support/internet/setup-improve-wifi-speed.html> (last visited 10/13/2020). Additionally, TDS provides the erro and erro Beacon

which are 802.11a/b/g/n/ac compliant <https://tdstelecom.com/shop/internet-services/safety-security-services/tds-wifi-plus-test.html> (last visited 10/13/2020); <https://support.eero.com/hc/en-us/articles/360034404371-Does-eero-support-802-11ax-> (last visited 10/13/2020). Such conduct demonstrates TDS's specific intent (or at least willful blindness) to actively aid and abet others to infringe, including but not limited to TDS's partners and downstream customers, whose use of the *Accused 802.11 Instrumentalities* constitutes direct infringement of at least claim 23 of the '844 patent.

39. Upon information and belief, TDS is also liable as a contributory infringer of the '844 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States componentry especially made to comply with 802.11 Standard which, as shown in Exhibit I, constitutes an infringement of the '844 patent. The *Accused 802.11 Instrumentalities* are material components for use in practicing the '844 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

40. The Accused Instrumentality infringed and continues to infringe at least claim 23 of the '844 patent during the pendency of the '844 patent.

41. CDN has been harmed by the TDS's infringing activities.

COUNT 2 – INFRINGEMENT OF U.S. PATENT NO. 7,860,462

42. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

43. On December 28, 2010, the '462 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Adaptive power control for multicast transmission" [sic].

44. CDN is the assignee and owner of the right, title and interest in and to the ‘462 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

45. Upon information and belief, TDS has and continues to directly infringe one or more claims of the ‘462 patent by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit J hereto (the “*Accused 802.11 Instrumentalities*”). For example, upon information and belief, TDS at least uses, sells and offers to sell the *Accused 802.11 Instrumentalities* in United States.

46. Exemplary infringement analysis showing infringement of at least claims 15 and 19 of the ‘462 patent is set forth in Exhibit J. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by TDS with respect to the ‘462 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the ‘462 patent.

47. Upon information and belief, users of devices containing TDS’s *Accused 802.11 Instrumentalities* have and will continue to directly infringe at least claims 15 and 19 of the ‘462 patent.

48. Upon information and belief, TDS had knowledge of the ‘462 patent at least as early as its receipt of this complaint.

49. TDS’s encouragement of others to use the *Accused 802.11 Instrumentalities*— knowing that such use, as alleged herein, infringes at least claims 15 and 19 of the ‘462 patent—

constitutes inducement of others under 35 U.S.C. § 271(b). TDS's encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused 802.11 Instrumentalities* are not only compliant with the IEEE Std 802.11. Standard ("802.11") but specifically intended for use an 802.11 product.

50. For example, on its website, TDS expressly states its 5GHz range is smaller but supports faster connections <https://tdstelecom.com/support/internet/setup-improve-wifi-speed.html> (last visited 10/13/2020). Additionally, TDS provides the eero and eero Beacon which are 802.11a/b/g/n/ac compliant <https://tdstelecom.com/shop/internet-services/safety-security-services/tds-wifi-plus-test.html> (last visited 10/13/2020); <https://support.eero.com/hc/en-us/articles/360034404371-Does-eero-support-802-11ax-> (last visited 10/13/2020). Such conduct demonstrates TDS's specific intent (or at least willful blindness) to actively aid and abet others to infringe, including but not limited to TDS's partners and downstream customers, whose use of the *Accused 802.11 Instrumentalities* constitutes direct infringement of at least claims 15 and 19 of the '462 patent.

51. Upon information and belief, TDS is also liable as a contributory infringer of the '462 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States componentry especially made to comply with 802.11 Standard which, as shown in Exhibit J, constitutes an infringement of the '462 patent. The *Accused 802.11 Instrumentalities* are material components for use in practicing the '462 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

52. The Accused Instrumentality infringed and continues to infringe at least claim 15 and 19 of the '462 patent during the pendency of the '462 patent.

53. CDN has been harmed by the TDS's infringing activities.

COUNT 3– INFRINGEMENT OF U.S. PATENT NO. 7,293,291

54. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

55. On November 6, 2007, the '291 patent was duly and legally issued by the United States Patent and Trademark Office under the title "System and method for detecting computer port inactivity"

56. CDN is the assignee and owner of the right, title and interest in and to the '291 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

57. Upon information and belief, TDS has and continues to directly infringe one or more claims of the '291 patent by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit K hereto (the "*Accused Port Triggering Instrumentalities*"). For example, upon information and belief, TDS at least uses, sells and offers to sell the *Accused Port Triggering Instrumentalities* in United States.

58. Exemplary infringement analysis showing infringement of at least claim 1 of the '291 patent is set forth in Exhibit K. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by TDS with respect to the '291 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the '291 patent.

59. Upon information and belief, users of devices containing TDS’s *Accused Port Triggering Instrumentalities* have and will continue to directly infringe at least claim 1 of the ‘291 patent.

60. Upon information and belief, TDS had knowledge of the ‘291 patent at least as early as its receipt of this complaint.

61. TDS’s encouragement of others to use the *Accused Port Triggering Instrumentalities*—knowing that such use, as alleged herein, infringes at least claim 1 of the ‘291 patent—constitutes inducement of others under 35 U.S.C. § 271(b). TDS’s encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Port Triggering Instrumentalities* are not only configured to enable port triggering but specifically intended for use router products designed to utilize port triggering functionality.

62. For example, TDS provides the eero and eero Beacon <https://tdstelecom.com/shop/internet-services/safety-security-services/tds-wifi-plus.html> (last visited 10/13/2020). The eero is specifically designed to configure “port forwarding” whereby “you can add a reservation under IPv4 Reservations & Port Forwards or a firewall rule under IPv6 Firewall Rules.” <https://support.eero.com/hc/en-us/articles/207908443-How-do-I-configure-port-forwarding-> (last visited 10/13/2020) . Such conduct demonstrates TDS’s specific intent (or at least willful blindness) to actively aid and abet others to infringe, including but not limited to TDS’s partners and downstream customers, whose use of the *Accused Port Triggering Instrumentalities* constitutes direct infringement of at least claim 1 of the ‘291 patent.

63. Upon information and belief, TDS is also liable as a contributory infringer of the ‘291 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United

States especially configured to enable router port forwarding which, as shown in Exhibit K, constitutes an infringement of the ‘291 patent. The *Accused Port Triggering Instrumentalities* are material components for use in practicing the ‘291 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

64. The Accused Instrumentality infringed and continues to infringe at least claim 1 of the ‘291 patent during the pendency of the ‘291 patent.

65. CDN has been harmed by the TDS’s infringing activities.

COUNT 4 – INFRINGEMENT OF U.S. PATENT NO. 7,565,699

66. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

67. On July 21, 2009, the ‘699 patent was duly and legally issued by the United States Patent and Trademark Office under the title “System and method for detecting computer port inactivity”

68. CDN is the assignee and owner of the right, title and interest in and to the ‘699 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

69. Upon information and belief, TDS has and continues to directly infringe one or more claims of the ‘699 patent by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit L hereto (the “*Accused Port Triggering Instrumentalities*”). For example, upon information and belief, TDS at least uses, sells and offers to sell the *Accused Port Triggering Instrumentalities* in United States.

70. Exemplary infringement analysis showing infringement of at least claim 1 of the ‘699 patent is set forth in Exhibit L. This infringement analysis is necessarily preliminary, as it

is provided in advance of any discovery provided by TDS with respect to the ‘699 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the ‘699 patent.

71. Upon information and belief, users of devices containing TDS’s *Accused Port Triggering Instrumentalities* have and will continue to directly infringe at least claim 1 of the ‘699 patent.

72. Upon information and belief, TDS had knowledge of the ‘699 patent at least as early as its receipt of this complaint.

73. TDS’s encouragement of others to use the *Accused Port Triggering Instrumentalities*—knowing that such use, as alleged herein, infringes at least claim 1 of the ‘699 patent—constitutes inducement of others under 35 U.S.C. § 271(b). TDS’s encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Port Triggering Instrumentalities* are not only configured to enable port triggering but specifically intended for use router products designed to utilize port triggering functionality.

74. For example, TDS provides the eero and eero Beacon <https://tdstelecom.com/shop/internet-services/safety-security-services/tds-wifi-plus.html> (last visited 10/13/2020). The eero is specifically designed to configure “port forwarding” whereby “you can add a reservation under IPv4 Reservations & Port Forwards or a firewall rule under IPv6 Firewall Rules.” <https://support.eero.com/hc/en-us/articles/207908443-How-do-I-configure-port-forwarding-> (last visited 10/13/2020). Such conduct demonstrates TDS’s specific intent (or at least willful blindness) to actively aid and abet others to infringe, including but not

limited to TDS's partners and downstream customers, whose use of the *Accused Port Triggering Instrumentalities* constitutes direct infringement of at least claim 1 of the '699 patent.

75. Upon information and belief, TDS is also liable as a contributory infringer of the '699 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States componentry especially configured to enable router port triggering which, as shown in Exhibit L, constitutes an infringement of the '699 patent. The *Accused Port Triggering Instrumentalities* are material components for use in practicing the '699 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

76. The Accused Instrumentality infringed and continues to infringe at least claim 1 of the '699 patent during the pendency of the '699 patent.

77. CDN has been harmed by the TDS's infringing activities.

COUNT 5 – INFRINGEMENT OF U.S. Patent No. 7,164,714

78. The allegations set forth in the foregoing paragraphs are incorporated into this Count

79. On January 16, 2007, the '714 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Video transmission and processing system for generating a user mosaic."

80. CDN is the assignee and owner of the right, title and interest in and to the '714 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

81. Upon information and belief, TDS has and continues to directly infringe one or more claims of the '714 patent by making, using (e.g., developing, testing, installing or otherwise

using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit M hereto (the “*Accused Video Guidance Instrumentalities*”). For example, upon information and belief, TDS at least uses, sells and offers to sell the *Accused Video Guidance Instrumentalities* in United States.

82. Exemplary infringement analysis showing infringement of at least claims 13 and 15 of the ‘714 patent is set forth in Exhibit M. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by TDS with respect to the ‘714 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the ‘714 patent.

83. Upon information and belief, users of devices containing TDS’s *Accused Video Guidance Instrumentalities* have and will continue to directly infringe at least claims 13 and 15 of the ‘714 patent.

84. Upon information and belief, TDS had knowledge of the ‘714 patent at least as early as its receipt of this complaint.

85. TDS’s encouragement of others to use the *Accused Video Guidance Instrumentalities*—knowing that such use, as alleged herein, infringes at least claim 15 the ‘714 patent—constitutes inducement of others under 35 U.S.C. § 271(b). TDS’s encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Video Guidance Instrumentalities* are not only transmitting video but specifically processes the video to generate mosaics.

86. For example, on its website, TDS expressly states: “The on-screen program guide displays up to two weeks of TV programing.” <https://tdstelecom.com/support/tds-tv-plus/feature-guide.html> (last visited 10/13/2020.) Additionally, TDS displays a sample video in the guide and indicates that pressing the OK button for a show in progress provides the selected video output. <https://tdstelecom.com/support/tds-tv-plus/feature-guide.html> (last visited 08/25/2020.) Such conduct demonstrates TDS’s specific intent (or at least willful blindness) to actively aid and abet others to infringe, including but not limited to TDS’s partners and downstream customers, whose use of the *Accused Video Guidance Instrumentalities* constitutes direct infringement of at least claims 13 and 15 of the ‘714 patent.

87. Upon information and belief, TDS is also liable as a contributory infringer of the ‘714 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States componentry especially made to supply a television guide which, as shown in Exhibit M, constitutes an infringement of the ‘714 patent. The *Accused Video Guidance Instrumentalities* are material components for use in practicing the ‘714 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

88. The Accused Instrumentality infringed and continues to infringe at least claims 13 and 15 of the ‘714 patent during the pendency of the ‘714 patent.

89. CDN has been harmed by the TDS’s infringing activities.

COUNT 6 – INFRINGEMENT OF U.S. Patent No. 6,865,532

90. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

91. On March 8, 2005, the ‘532 patent was duly and legally issued by the United States Patent and Trademark Office under the title “Method for recognizing spoken identifiers having predefined grammars.”

92. CDN is the assignee and owner of the right, title and interest in and to the ‘532 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

93. Upon information and belief, TDS has and continues to directly infringe one or more claims of the ‘532 patent by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit N hereto (the “*Accused Speech Recognition Instrumentalities*”). For example, upon information and belief, TDS at least uses, sells and offers to sell the *Accused Speech Recognition Instrumentalities* in United States.

94. Exemplary infringement analysis showing infringement of claim 1 of the ‘532 patent is set forth in Exhibit N. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by TDS with respect to the ‘532 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the ‘532 patent.

95. Upon information and belief, users of devices containing TDS’s *Accused Speech Recognition Instrumentalities* have and will continue to directly infringe claims 1 ‘532 patent.

96. Upon information and belief, TDS had knowledge of the ‘532 patent at least as early as its receipt of this complaint.

97. TDS’s encouragement of others to use the *Accused Speech Recognition Instrumentalities*—knowing that such use, as alleged herein, infringes claims 1 of the ‘532 patent—constitutes inducement of others under 35 U.S.C. § 271(b). TDS’s encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Speech Recognition Instrumentalities* are not only configured to enable speech recognition but specifically intended for use as a speech recognition tool.

98. For example, TDS’s “How to use Remote Control” available from its website, promotes a TDS remote to issue at least one voice command using speech recognition. <https://tdstelecom.com/support/tds-tv-plus/equipment-remote-control.html> (last visited 10/13/2020). Such conduct demonstrates TDS’s specific intent (or at least willful blindness) to actively aid and abet others to infringe, including but not limited to TDS’s partners and downstream customers, whose use of the *Accused Speech Recognition Instrumentalities* constitutes direct infringement of claims 1 of the ‘532 patent.

99. Upon information and belief, TDS is also liable as a contributory infringer of the ‘532 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States componentry especially made to enable the speech recognition functionality which, as shown in Exhibit N, constitutes an infringement of the ‘532 patent. The *Accused Speech Recognition Instrumentalities* are material components for use in practicing the ‘532 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

100. The Accused Instrumentality infringed and continues to infringe claim 1 of the ‘532 patent during the pendency of the ‘532 patent.

101. CDN has been harmed by the TDS's infringing activities.

COUNT 7 – INFRINGEMENT OF U.S. Patent No. 6,628,344

102. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

103. On September 30, 2003, the '344 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Remote control system providing an automatic assertion of a preset selection value concurrent with submission of a user preferred selection value."

104. CDN is the assignee and owner of the right, title and interest in and to the '344 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

105. Upon information and belief, TDS has and continues to directly infringe one or more claims of the '344 patent by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit O hereto (the "*Accused Remote Controlling Instrumentalities*"). For example, upon information and belief, TDS at least uses, sells and offers to sell the *Accused Remote Controlling Instrumentalities* in United States.

106. Exemplary infringement analysis showing infringement of at least claim 1 of the '344 patent is set forth in Exhibit O. This infringement analysis is necessarily preliminary, as it is provided in advance of any discovery provided by TDS with respect to the '344 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the '344 patent.

107. Upon information and belief, users of devices containing TDS's *Accused Remote Controlling Instrumentalities* have and will continue to directly infringe at least claim 1 of the '344 patent.

108. Upon information and belief, TDS had knowledge of the '344 patent at least as early as its receipt of this complaint.

109. TDS's encouragement of others to use the *Accused Remote Controlling Instrumentalities*—knowing that such use, as alleged herein, infringes at least claim 1 of the '344 patent—constitutes inducement of others under 35 U.S.C. § 271(b). TDS's encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Remote Controlling Instrumentalities* are not only capable of controlling more than one device but specifically intended to remotely control multiple devices.

110. For example, on its website, TDS expressly states in the TDS User Guide "Power on/off for devices programmed to work with remote." <https://tdstelecom.com/support/tv/tv-user-guides-and-demos.html> (User Guide: A detailed instruction manual for using TDS TV, your set-top box, and remote control) (last visited 10/13/2020.) Such conduct demonstrates TDS's specific intent (or at least willful blindness) to actively aid and abet others to infringe, including but not limited to TDS's partners and downstream customers, whose use of the *Accused Remote Controlling Instrumentalities* constitutes direct infringement of at least claim 1 of the '344 patent.

111. Upon information and belief, TDS is also liable as a contributory infringer of the '344 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States remotes which, as shown in Exhibit O, constitutes an infringement of the '344 patent. The

Accused Remote Controlling Instrumentalities are material components for use in practicing the ‘344 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

112. The Accused Instrumentality infringed and continues to infringe at least claim 1 of the ‘344 patent during the pendency of the ‘344 patent.

113. CDN has been harmed by the TDS’s infringing activities.

COUNT 8 – INFRINGEMENT OF U.S. Patent No. 6,311,180

114. The allegations set forth in the foregoing paragraphs are incorporated into this Count.

115. On October 30, 2001, the ‘180 patent was duly and legally issued by the United States Patent and Trademark Office under the title “Method for mapping and formatting information for a display device”

116. CDN is the assignee and owner of the right, title and interest in and to the ‘180 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

117. Upon information and belief, TDS directly infringed one or more of the claims of the ‘180 patent during the relevant damages period by making, using (e.g., developing, testing, installing or otherwise using) offering to sell, selling, or importing into the United States products, specifically one or more of the products identified in Exhibit P hereto (the “*Accused Display Instrumentalities*”). For example, upon information and belief, TDS at least uses, sells and offers to sell the *Accused Display Instrumentalities* in United States.

118. Exemplary infringement analysis showing infringement of claim 1 of the ‘180 patent is set forth in Exhibit P. This infringement analysis is necessarily preliminary, as it is

provided in advance of any discovery provided by TDS with respect to the ‘180 patent. CDN reserves all rights to amend, supplement and modify this preliminary infringement analysis. Nothing in the attached chart should be construed as any express or implied contention or admission regarding the construction of any term or phrase of the claims of the ‘180 patent.

119. Upon information and belief, users of devices containing TDS’s *Accused Display Instrumentalities* directly infringed claim 1 the ‘180 patent during the relevant damages period. The evidence indicates that TDS has been operating in an infringing manner since at least 2016 and through to the expiration of the ‘180 patent.

120. Upon information and belief, TDS had knowledge of the ‘180 patent at least as early as its receipt of this complaint.

121. TDS’s encouragement of others to use the *Accused Display Instrumentalities*—knowing that such use, as alleged herein, infringes claim 1 of the ‘180 patent—constitutes inducement of others under 35 U.S.C. § 271(b). TDS’s encouragement of infringement includes actively advertising, promoting and distributing technical information through its website (and other sources) that the *Accused Display Instrumentalities* are not only generating a document that fits on the display device but specifically generating a document containing the preferred display contents.

122. For example, on its website, TDS promotes the ability to watch content on multiple devices. <https://tdstelecom.com/shop/tv/tdstv-plus/ways-to-watch.html> (last visited 10/13/2020). TDS TV+ is specifically designed to display content based on the display device and viewing preferences selected. Such conduct demonstrates TDS’s specific intent (or at least willful blindness) to actively aid and abet others to infringe, including but not limited to TDS’s

partners and downstream customers, whose use of the *Accused Display Instrumentalities* constitutes direct infringement of claim 1 of the '180 patent.

123. Upon information and belief, TDS is also liable as a contributory infringer of the '180 patent under 35 U.S.C. § 271(c) by offering to sell, selling and/or importing into the United States componentry especially made to enable the speech recognition functionality which, as shown in Exhibit P, constitutes an infringement of the '180 patent. The *Accused Display Instrumentalities* are material components for use in practicing the '180 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

124. The Accused Instrumentality infringed and continues to infringe claims 1 through 8 of the '532 patent during the pendency of the '180 patent.

125. CDN has been harmed by the TDS's infringing activities.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, CDN demands a trial by jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff CDN demands judgment for itself and against TDS as follows:

- A. An adjudication that the TDS has infringed the patents asserted herein;
- B. An award of damages to be paid by TDS adequate to compensate CDN for TDS's past infringement of the patents asserted herein, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of CDN's reasonable attorneys' fees; and

D. An award to CDN of such further relief at law or in equity as the Court deems just and proper.

Dated: October 14, 2020

DEVLIN LAW FIRM LLC

/s/ James Lennon

James M. Lennon

jlennon@devlinlawfirm.com

Timothy Devlin (*pro hac vice* to be filed)

tdevlin@devlinlawfirm.com

1526 Gilpin Ave.

Wilmington, Delaware 19806

Telephone: (302) 449-9010

Facsimile: (302) 353-4251

Attorneys for Plaintiff CDN Innovations, LLC